

<b>INFORMATION DISCLOSURE STATEMENT</b> <i>(Use several sheets if necessary)</i>		ATTY. DOCKET NO. CISCO-7703		SERIAL NO. 10/807,547	
		APPLICANT Hart et al.			
		FILING DATE 22 Mar 2004		GROUP 2661	

JUN 17 2004

## U.S. PATENT DOCUMENTS

EXAMINER INITIALS	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE IF APPROPRIATE	
				375	285		
/DR/ AA	2002/0131516	Sep. 19, 2002	El-Gamal et al.	375	285	Nov. 5, 2001	
	A1						
	AB	5,912,876	Jun. 15, 1999	H'mimy	370	210	Jan. 15, 1997
	AC	5,953,311	Sep. 14, 1999	Davies et al.	370	210	Feb. 18, 1997
	AD	5,963,592	Oct. 5, 1999	Kim	375	232	Dec. 1, 1997
	AE	5,973,642	Oct. 26, 1999	Li et al.	342	378	Apr. 1, 1998
	AF	6,327,314 B1	Dec. 4, 2001	Cimini Jr. et al.	375	340	Jun. 3, 1998
	AG	6,442,129 B1	Aug. 27, 2002	Yonge, III et al.	370	204	Dec. 6, 1999
	AH	6,445,342 B1	Sep. 3, 2002	Thomas et al.	342	367	Jun. 30, 2000
	AI	6,473,393 B1	Oct. 29, 2002	Ariyavitsakul et al.	370	203	Dec. 18, 1998
	AJ	6,477,210 B2	Nov. 5, 2002	Chuang et al.	375	340	Feb. 1, 2001
	AK	6,487,253 B1	Nov. 26, 2002	Jones, IV et al.	375	260	Oct. 4, 1999
	AL	6,496,535 B2	Dec. 17, 2002	Xu	375	219	Mar. 23, 2001
AM	6,141,393	Oct. 31, 2000	Thomas et al.	375	347	Mar. 3, 1999	
/DR/ AN	6,298,035 B1	Oct. 2, 2001	Heiskala	370	206	Dec. 21, 1999	

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY	CLASS	SUB-CLASS	TRANS- LATION YES   NO
	AO						

## OTHER DISCLOSURES (Including Author, Title, Date, Pertinent Pages, Place of Publication, Etc.)

/DR/ AP	Ove Edfors, Magnus Sandell, Jan-Jaap van de Beek, Sarah Kate Wilson and Per Ola Borjesson. "Analysis of DFT-Based Channel Estimators for OFDM." <i>Wireless Personal Communications</i> , vol. 12, Issue 1, pp. 55-70, January 2000.		
EXAMINER	/Daniel Ryman/		

"EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include a copy of this form with next communication to Applicant.

<b>INFORMATION DISCLOSURE STATEMENT</b>  <i>(Use several sheets if necessary)</i>				ATTY. DOCKET NO. CISCO-7703	SERIAL NO. 10/807, 547		
				APPLICANT Hart et al.			
				FILING DATE 22 Mar 2004	GROUP 2661		
<b>U.S. PATENT DOCUMENTS</b>							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE IF APPROPRIATE
BA							
<b>FOREIGN PATENT DOCUMENTS</b>							
		DOCUMENT NUMBER	PUBLI-CATION DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION YES I NO
BB							
<b>OTHER DISCLOSURES (Including Author, Title, Date, Pertinent Pages, Place of Publication, Etc.)</b>							
/DR/	BC	Ye (Geoffrey) Li, Leonard J. Cimini, Jr., and Nelson R. Sollenberger. "Robust Channel Estimation for OFDM Systems with Rapid Dispersive Fading Channels." <i>IEEE Transactions on Communications</i> , vol. 46, no. 7, pp. 902-915, July 1998.					
	BD	Vittoria Mignone and Alberto Morello. "CD3-OFDM: A Novel Demodulation Scheme for Fixed and Mobile Receivers." <i>IEEE Transactions on Communications</i> , vol. 44, no. 9, pp. 1144-1151, Sept. 1996.					
	BE	Ye (Geoffrey) Li. "Simplified Channel Estimation for OFDM Systems with Multiple Transmit Antennas." <i>IEEE Transactions on Wireless Communications</i> , vol. 1, no. 1, pp. 67-75, Jan. 2002.					
	BF	Juha Heiskala and John Terry. <i>OFDM Wireless LANs: A Theoretical and Practical Guide</i> (ISBN: 0672321572) Publisher: Sams Publishing, 2002. Chapter 2, page 81: "Enhancing the Channel Estimate", and Chapter 2, page 84: bibliography for Chapter 2.					
	BG	Alexandre Ribeiro Dias, Stephanie Roquette and Karine Gosse. "MTMR Channel Estimation and Pilot Design in the Context of Space-Time Block Coded OFDM-Based WLANs." Centre de Recherche de Motorola, Paris. Available online at <a href="http://www.telecom.ntua.gr/fitness/dissemination/MOT-mtmr_channel_estimation_wlan.pdf">http://www.telecom.ntua.gr/fitness/dissemination/MOT-mtmr_channel_estimation_wlan.pdf</a> 2002					
	BH	Erik G. Larsson, Guoqing Liu, Jian Li, and Georgios B. Giannakis. "Joint Symbol Timing and Channel Estimation for OFDM Based WLANs." <i>IEEE Communications Letters</i> , vol. 5, no. 8, pp. 325-327, Aug. 2001.					
↓	BI	Hui Liu and Ufuk Tureli. "A High Efficiency Carrier Estimator for OFDM Communications." <i>IEEE Communications Letters</i> , vol. 2, no. 4, pp. 104-106, Apr. 1998.					
/DR/	BJ	J. Stott. "The Effects of Phase Noise in COFDM." <i>EBU Technical Review</i> , pp. 1-22, Summer 1998.					
EXAMINER  /Daniel Ryman/				DATE CONSIDERED  08/21/2007			
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include a copy of this form with next communication to Applicant.							

			ATTY. DOCKET NO. CISCO-7703	SERIAL NO. 10/807,547
INFORMATION DISCLOSURE STATEMENT			APPLICANT Hart et al.	
(Use several sheets if necessary)			FILING DATE 22 Mar 2004	GROUP 2661

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE IF APPROPRIATE
	CA						

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION YES I NO
	CB						

## OTHER DISCLOSURES (Including Author, Title, Date, Pertinent Pages, Place of Publication, Etc.)

/DR/	CC	Jan-Jaap van de Beek, Ove Edfors, Per Ola Borjesson, Mattias Wahlgqvist and Christer Ostberg. "Channel Estimation in the Uplink of an OFDM System." NRS Symposium, pp. 32-35, Lund, Sweden, August 1996.
	CD	SeongHo Ha, Inho Hwang and HwangSoo Lee. "A Decision-Directed Frame Synchronization Algorithm for OFDM Systems." IEICE Trans. Communication, vol. E83-B, no. 7, pp.1563-1566, Jul. 2000.
	CE	Thomas Keller, Lorenzo Piazza, Paolo Mandarini and Lajos Hanzo. "Orthogonal Frequency Division Multiplex Synchronization Techniques for Frequency-Selective Fading Channels." IEEE Journal on Selected Areas in Communications, vol. 19, no. 6, pp. 999-1008, Jun. 2001.
	CF	I. Barhumi and M. Moonen. "Pilot Tone-based Channel Estimation for ODFM Systems with Transmitter Diversity in Mobile Wireless Channels." from Proceedings of the program for research on integrated systems and circuits (ProRISC), Veldhoven, The Netherlands, pp. 270-275, Nov. 2001.
	CG	Nils Sundstrom, Ove Edfors, Per Odling, Hakan Eriksson, Timo Koski and Per Ola Borjesson. "Combined Linear-Viterbi Equalizers-A Comparative Study and A Minimax Design." IEEE Vehicular Technology Conference, pp. 1263-1267, Stockholm, Sweden, Jun. 1994.
↓	CH	J H Stott. "Explaining Some of the Magic of the COFDM." From Proceedings of 20th International Television Symposium 1997, Montreux, Switzerland, Jun. 13-17, 1997. Available online at <a href="http://www.bbc.co.uk/rd/pubs/papers/paper_15/paper_15.html">http://www.bbc.co.uk/rd/pubs/papers/paper_15/paper_15.html</a> .
/DR/	CI	Ufuk Tureli, Hui Liu and Michael Zoltowski. "OFDM Blind Carrier Offset Estimation: ESPRIT." IEEE TRANSACTIONS ON COMMUNICATIONS, vol. 48, no. 9, September 2000.

EXAMINER	DATE CONSIDERED
/Daniel Ryman/	08/21/2007

EXAMINER: initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include a copy of this form with next communication to Applicant.

INFORMATION DISCLOSURE STATEMENT  (Use several sheets if necessary)		ATTY. DOCKET NO. CISCO-7703	SERIAL NO. 10/807, 547
APPLICANT Hart et al.			
FILING DATE 22 Mar 2004		GROUP 2661	

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE IF APPROPRIATE
	DA						

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	PUBLI-CATION DATE	COUNTRY	CLASS	SUB-CLASS	TRANS-LATION YES   NO
	DB						

## OTHER DISCLOSURES (Including Author, Title, Date, Pertinent Pages, Place of Publication, Etc.)

/DR/	DC	Jan-Jaap van de Beek, Ove Edfors, Magnus Sandell, Sarah Kate Wilson and Per Ola Borjesson. "On Channel Estimation in OFDM Systems." Division of Signal Processing Lule University of Technology, Sweden & Purdue University School of Electrical Engineering USA, Proceedings at IEEE VTC 95, Chicago, 1995. Available online at <a href="http://www.sm.luth.se/csee/sp/research/conference/On_Channel_Est_in_OFDM_Syst.pdf">http://www.sm.luth.se/csee/sp/research/conference/On_Channel_Est_in_OFDM_Syst.pdf</a> .
	DD	M. Julia Fernandez-Getino Garcia, Ove Edfors and Jose M. Paez-Borallo. "Joint 2D-Pilot-Symbol-Assisted-Modulation and Decision-Directed Frequency Synchronization Schemes For Coherent OFDM." Proc. ICASSP'2000, vol 5, pp. 2961-2964. Istanbul, Turkey, June 2000.
	DE	Ye (Geoffrey) Li. "Simplified Channel Estimation for OFDM Systems With Multiple Transmit Antennas." IEEE TRANSACTIONS ON WIRELESS COMMUNICATIONS, vol. 1, no. 1, pp.67-75, January 2002.
	DF	Michele Morelli and Umberto Mengali. "A Comparison of Pilot-Aided Channel Estimation Methods for OFDM Systems." IEEE TRANSACTIONS ON SIGNAL PROCESSING, vol. 49, no. 12, pp.3065-3073, December 2001.
↓	DG	B. Muquet, M. de Courville, G.B. Giannakis, Z. Wang and P. Duhamel. "Reduced Complexity Equalizers For Zero-Padded OFDM Transmissions." Intl. Conf. on Acoustics, Speech and Signal Processing , June 2000, Istanbul, Turkey. Available online at <a href="http://clue.eng.iastate.edu/~zhengdao/publications/papers/mcgw00.pdf">http://clue.eng.iastate.edu/~zhengdao/publications/papers/mcgw00.pdf</a> .
/DR/	DH	Ove Edfors, Magnus Sandell, Jan-Jaap van de Beek, Daniel Landstrom and Frank Sjoberg. "An Introduction to Orthogonal Frequency-Division Multiplexing." Research Report TULEA 1996:16, Div. of Signal Processing, Luleå University of Technology, Luleå, Sept. 1996.

EXAMINER  /Daniel Ryman/	DATE CONSIDERED  08/21/2007
--------------------------------	-----------------------------------

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include a copy of this form with next communication to Applicant.

<b>INFORMATION DISCLOSURE STATEMENT</b>  <i>(Use several sheets if necessary)</i>		ATTY. DOCKET NO. CISCO-7703	SERIAL NO. 10/807, 547
		APPLICANT Hart et al.	
		FILING DATE 22 Mar 2004	GROUP 2661

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE IF APPROPRIATE
	EA						

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION YES / NO
	EB						

## OTHER DISCLOSURES (Including Author, Title, Date, Pertinent Pages, Place of Publication, Etc.)

/DR/	EC	Takeshi Onizawa, Masato Mizoguchi and Masahiro Morikura. "A Novel Channel Estimation Scheme Employing Adaptive Selection of Frequency-Domain Filters for OFDM Systems." <i>IEICE Trans. Comm.</i> , vol. E82-B, no. 12, pp.1923-1930, December 1999.
	ED	Magnus Sandell and Ove Edfors. "A Comparative Study of Pilot-Based Channel Estimators for Wireless OFDM." <i>Div. Signal Processing, Luleå Univ. Technol.</i> , Luleå, Sweden, Res. Rep. TULEA 1996: 19, Sept. 1996.
	EE	Erik Lindskog and Claes Tidestav. "Reduced Rank Channel Estimation." <i>IEEE Vehicular Technology Conference</i> , Houston, TX, May 16-20, 1999, pp 1126-1130.
↓	EF	Heiko Schmidt, Volker Kuhn and Karl-Dirk Kammeyer. "Channel Tracking in Wireless OFDM Systems." <i>The 5<sup>th</sup> World Multi-Conference on Systemics, Cybernetics and Informatics, SCI 2001</i> , July 22-25, 2001, Orlando, Florida USA. Available online at <a href="http://www.ant.uni-bremen.de/whomes/schmidt/papers/sci2001.pdf">http://www.ant.uni-bremen.de/whomes/schmidt/papers/sci2001.pdf</a> .
/DR/	EG	Ove Edfors, Magnus Sandell, Jan-Jaap van de Beek, Sarah Kate Wilson and Per Ola Borjesson. "OFDM Channel Estimation by Singular Value Decomposition." <i>IEEE Trans. Commun.</i> , vol. 46, pp. 931-939, July 1998.
	EH	
	EI	

EXAMINER	DATE CONSIDERED
/Daniel Ryman/	08/21/2007

\*EXAMINER: initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include a copy of this form with next communication to Applicant.